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Work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Report of the Secretary-General

Summary

In accordance with Economic and Social Council resolution 645 G (XXIII), the Secretary-General reports biennially to the Council on the work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals, and of its two subcommittees.

The present report concerns the work of the Committee of Experts during the biennium 2015-2016 and the implementation of Economic and Social Council resolution 2015/7.

In accordance with that resolution, the secretariat has published the nineteenth revised edition of the *Recommendations on the Transport of Dangerous Goods: Model Regulations*, the sixth revised edition of the *Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria* and the sixth revised edition of the *Globally Harmonized System of Classification and Labelling of Chemicals*.

All the main legal instruments and codes governing the international transport of dangerous goods by sea, air, road, rail or inland waterway have been amended accordingly, with effect from 1 January 2017, and many Governments have also transposed the provisions of the Model Regulations into their own legislation for domestic traffic for application from 2017.

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Information on the contact details of competent authorities responsible for national regulations applicable to the transport of dangerous goods by modes of transport other than by sea or by air and of national authorities competent for authorizing the allocation of the "UN" approval mark on packagings and tanks that meet the specifications of the *Recommendations on the Transport of Dangerous Goods: Model Regulations* was collected by the secretariat.

Many Governments and international organizations have revised or taken steps to revise existing national and international legislation in order to implement the Globally Harmonized System as soon as possible.

The Committee adopted amendments to the Model Regulations and the *Manual of Tests and Criteria*, which consist mainly of new or revised provisions that concern listing and classification of dangerous goods, packing instructions, electric storage systems, testing of explosives, transport under temperature control, transport of vehicles powered by dangerous substances and references to standards applicable to pressure receptacles.

The Committee also adopted amendments to the Globally Harmonized System which include revised criteria for categorization of flammable gases within category 1; miscellaneous amendments intended to clarify the definitions of some health hazard classes; additional guidance to extend the coverage of section 14 of the Safety Data Sheets to all bulk cargoes, regardless of their physical state, transported under International Maritime Organization (IMO) instruments; revised and further rationalized precautionary statements in annex 3; and a new example in annex 7 addressing labelling of small packagings with fold-out labels.

The Committee adopted a programme of work for the biennium 2017-2018; sessions for the Subcommittee of Experts on the Transport of Dangerous Goods, for the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals and for the Committee have been planned for the period 2017-2018, in accordance with Economic and Social Council resolution 1999/65.

The Committee is recommending a draft resolution on its work for adoption by the Economic and Social Council.

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I. Draft resolution for adoption by the Economic and Social Council

1. The Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals recommends to the Economic and Social Council the adoption of the following draft resolution:

Work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

The Economic and Social Council,

Recalling its resolutions 1999/65 of 26 October 1999 and 2015/7 of 8 June 2015,

Having considered the report of the Secretary-General on the work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals during the biennium 2015-2016,[1]

A
Work of the Committee regarding the transport of dangerous goods

Recognizing the importance of the work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals for the harmonization of codes and regulations relating to the transport of dangerous goods,

Bearing in mind the need to maintain safety standards at all times and to facilitate trade, as well as the importance of these issues to the various organizations responsible for modal regulations, while meeting the growing concern for the protection of life, property and the environment through the safe and secure transport of dangerous goods,

Noting the ever-increasing volume of dangerous goods being introduced into worldwide commerce and the rapid expansion of technology and innovation,

Recalling that, while the major international instruments governing the transport of dangerous goods by the various modes of transport and many national regulations are now better harmonized with the Model Regulations annexed to the recommendations of the Committee on the transport of dangerous goods, further work on harmonizing these instruments is necessary to enhance safety and to facilitate trade, and recalling also that uneven progress in the updating of national inland transport legislation in some countries of the world continues to present serious challenges to international multimodal transport,

[1] E/2017/53.

1. *Expresses its appreciation* for the work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals with respect to matters relating to the transport of dangerous goods, including their security in transport;

2. *Requests* the Secretary-General:

(a) To circulate the new and amended recommendations on the transport of dangerous goods[2] to the Governments of Member States, the specialized agencies, the International Atomic Energy Agency and other international organizations concerned;

(b) To publish the twentieth revised edition of the *Recommendations on the Transport of Dangerous Goods: Model Regulations* and amendment 1 to the sixth revised edition of the *Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria* in all the official languages of the United Nations, in the most cost-effective manner, no later than the end of 2017;

(c) To make those publications available in book and electronic format and on the website of the Economic Commission for Europe, which provides secretariat services to the Committee;

3. *Invites* all Governments, the regional commissions, the specialized agencies, the International Atomic Energy Agency and the other international organizations concerned to transmit to the secretariat of the Committee their views on the work of the Committee, together with any comments that they may wish to make on the recommendations on the transport of dangerous goods;

4. *Invites* all interested Governments, the regional commissions, the specialized agencies and the international organizations concerned to take into account the recommendations of the Committee when developing or updating appropriate codes and regulations;

5. *Requests* the Committee to study, in consultation with the International Maritime Organization, the International Civil Aviation Organization, the regional commissions and the intergovernmental organizations concerned, the possibilities of improving the implementation of the Model Regulations on the transport of dangerous goods in all countries for the purposes of ensuring a high level of safety and eliminating technical barriers to international trade, including through the further harmonization of international agreements or conventions governing the international transport of dangerous goods;

6. *Invites* all Governments, as well as the regional commissions and organizations concerned, the International Maritime Organization and the International Civil Aviation Organization to provide feedback to the Committee regarding differences between the provisions of national, regional or international legal instruments and those of the Model Regulations, in order to enable the Committee to develop cooperative guidelines for enhancing consistency between these requirements and reducing unnecessary impediments; to identify existing substantive and international, regional and national differences, with the aim of reducing those differences in modal treatment to the greatest extent practical and

[2] See ST/SG/AC.10/44/Add.1 and 2.

ensuring that, where differences are necessary, they do not pose impediments to the safe and efficient transport of dangerous goods; and to undertake an editorial review of the Model Regulations and various modal instruments with the aim of improving clarity, user friendliness and ease of translation;

B

Work of the Committee regarding the Globally Harmonized System of Classification and Labelling of Chemicals

Bearing in mind that in paragraph 23 (c) of the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg Plan of Implementation),[3] countries were encouraged to implement the Globally Harmonized System of Classification and Labelling of Chemicals as soon as possible with a view to having the system fully operational by 2008,

Bearing in mind also that the General Assembly, in its resolution 57/253 of 20 December 2002, endorsed the Johannesburg Plan of Implementation and requested the Economic and Social Council to implement the provisions of the Plan relevant to its mandate and, in particular, to promote the implementation of Agenda 21[4] by strengthening system-wide coordination,

Noting with satisfaction:

(a) That the Economic Commission for Europe and all United Nations programmes and specialized agencies concerned with chemical safety in the field of transport or of the environment, in particular the United Nations Environment Programme, the International Maritime Organization and the International Civil Aviation Organization, have already taken appropriate steps to amend or update their legal instruments in order to give effect to the Globally Harmonized System of Classification and Labelling of Chemicals or are considering amending them as soon as possible;

(b) That the International Labour Organization, the Food and Agriculture Organization of the United Nations and the World Health Organization are also taking appropriate steps to adapt their existing chemical safety recommendations, codes and guidelines to the Globally Harmonized System, in particular in the areas of occupational health and safety, pesticide management and the prevention and treatment of poisoning;

(c) That national legislation or standards implementing the Globally Harmonized System (or allowing its application) in one or several sectors other than transport have already been issued in Argentina (2015), Australia (2012), Brazil (2009), Canada (2015), China (2010), Ecuador (2009), Japan (2006), Mauritius (2004), Mexico (2011), New Zealand (2001), the Republic of Korea (2006), the Russian Federation (2010), Serbia (2010), Singapore (2008), South Africa (2009), Switzerland (2009), Thailand (2012), the United States of America (2012), Uruguay

[3] *Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August-4 September 2002* (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex.

[4] *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992*, vol. I, *Resolutions Adopted by the Conference* (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex II.

(2009), Viet Nam (2009) and Zambia (2013), as well as in the 28 member States of the European Union and the 3 member States of the European Economic Area (2008);

(d) That work on the development or revision of national legislation, standards or guidelines applicable to chemicals in the implementation of the Globally Harmonized System continues in other countries, while in some others activities related to the development of sectoral implementation plans or national implementation strategies are being conducted or are expected to be initiated soon;

(e) That a number of United Nations programmes and specialized agencies and regional organizations, in particular the United Nations Institute for Training and Research, the International Labour Organization, the World Health Organization, the Economic Commission for Europe, Asia-Pacific Economic Cooperation, the Organization for Economic Cooperation and Development and the European Union, Governments and non-governmental organizations representing the chemical industry, have organized or contributed to multiple workshops, seminars and other capacity-building activities at the international, regional, subregional and national levels, in order to raise administration, health sector and industry awareness and to prepare for or support the implementation of the Globally Harmonized System;

Aware that effective implementation will require further cooperation between the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals and the international bodies concerned, continued efforts by the Governments of Member States, cooperation with the industry and other stakeholders, and significant support for capacity-building activities in countries with economies in transition and developing countries,

Recalling the particular significance of the United Nations Institute for Training and Research, International Labour Organization and Organization for Economic Cooperation and Development Global Partnership for Capacity-building to Implement the Globally Harmonized System of Classification and Labelling of Chemicals for building capacities at all levels,

1. *Commends* the Secretary-General on the publication of the sixth revised edition of the *Globally Harmonized System of Classification and Labelling of Chemicals*[5] in the six official languages of the United Nations, electronically and in book form, and its availability, together with related informational material, on the website of the Economic Commission for Europe which provides secretariat services to the Committee;

2. *Expresses its deep appreciation* to the Committee, the Commission, United Nations programmes, specialized agencies and other organizations concerned for their fruitful cooperation and their commitment to the implementation of the Globally Harmonized System;

3. *Requests* the Secretary-General:

[5] ST/SG/AC.10/30/Rev.6.

(a) To circulate the amendments[6] to the sixth revised edition of the *Globally Harmonized System of Classification and Labelling of Chemicals* to the Governments of Member States, the specialized agencies and other international organizations concerned;

(b) To publish the seventh revised edition of the *Globally Harmonized System of Classification and Labelling of Chemicals* in all the official languages of the United Nations in the most cost-effective manner, no later than the end of 2017, and to make it available in book and electronic format and on the website of the Commission;

(c) To continue to make information on the implementation of the Globally Harmonized System available on the website of the Commission;

4. *Invites* Governments that have not yet done so to take the necessary steps, through appropriate national procedures and/or legislation, to implement the Globally Harmonized System as soon as possible;

5. *Reiterates its invitation* to the regional commissions, United Nations programmes, specialized agencies and other organizations concerned to promote the implementation of the Globally Harmonized System and, where relevant, to amend their respective international legal instruments addressing transport safety, workplace safety, consumer protection or the protection of the environment, so as to give effect to the Globally Harmonized System through such instruments;

6. *Invites* Governments, the regional commissions, United Nations programmes, specialized agencies and other organizations concerned to provide feedback to the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals on the steps taken for the implementation of the Globally Harmonized System in all relevant sectors, through international, regional or national legal instruments, recommendations, codes and guidelines, including, when applicable, information about the transitional periods for its implementation;

7. *Encourages* Governments, the regional commissions, United Nations programmes, specialized agencies and other relevant international organizations and non-governmental organizations, in particular those representing industry, to strengthen their support for the implementation of the Globally Harmonized System by providing financial contributions and/or technical assistance for capacity-building activities in developing countries and countries with economies in transition;

C
Programme of work of the Committee

Taking note of the programme of work of the Committee for the biennium 2017-2018 as contained in paragraphs 49 and 50 of the report of the Secretary-General,[1]

[6] ST/SG/AC.10/44/Add.3.

Noting the relatively poor level of participation of experts from developing countries and countries with economies in transition in the work of the Committee and the need to promote their wider participation in its work,

1. *Decides* to approve the programme of work of the Committee;[1]

2. *Stresses* the importance of the participation of experts from developing countries and countries with economies in transition in the work of the Committee, calls, in that regard, for voluntary contributions to facilitate their participation, including through support for travel and daily subsistence, and invites Member States and international organizations in a position to do so to contribute;

3. *Requests* the Secretary-General to submit to the Economic and Social Council in 2019 a report on the implementation of the present resolution, the recommendations on the transport of dangerous goods and the Globally Harmonized System of Classification and Labelling of Chemicals.

II. Implementation of Economic and Social Council resolution 2015/7

A. Publications

2. As requested by the Economic and Social Council in its resolution 2015/7, the Secretary-General prepared the nineteenth revised edition[7] of the *Recommendations on the Transport of Dangerous Goods: Model Regulations*, the sixth revised edition[8] of the *Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria* and the sixth revised edition[9] of the *Globally Harmonized System of Classification and Labelling of Chemicals*. These revised editions were issued as United Nations publications in the six official languages of the United Nations.

3. Combined versions of the *Model Regulations*, the *Manual of Tests and Criteria* and the *Globally Harmonized System of Classification and Labelling of Chemicals* were also made available on a CD-ROM containing the English and French versions.

4. The *Model Regulations*, the *Manual of Tests and Criteria* and the *Globally Harmonized System* are available online in all languages in PDF format on the website of the Economic Commission for Europe (ECE). Editable electronic versions were made available to Governments, implementing specialized agencies and intergovernmental organizations upon request.

B. Implementation of the Recommendations on the Transport of Dangerous Goods: Model Regulations

5. In its resolution 2015/7, the Economic and Social Council invited all interested Governments, the regional commissions, the specialized agencies and the

[7] United Nations publication, Sales No. 15.VIII.1 and corrigenda.
[8] Ibid., Sales No. 15.VIII.3.
[9] Ibid., Sales No. 15.II.E.5 and corrigenda.

international organizations concerned, when developing or updating appropriate codes and regulations, to take into account the recommendations of the Committee.

6. The provisions of the nineteenth revised edition[7] of the *Model Regulations* have been incorporated into the following international instruments:

(a) International Maritime Organization (IMO): International Maritime Dangerous Goods Code, amendment 38-16 (mandatory application for the 163 contracting parties to the International Convention for the Safety of Life at Sea from 1 January 2018, with the possibility of application on a voluntary basis from 1 January 2017);

(b) International Civil Aviation Organization (ICAO): 2017-2018 edition of the Technical Instructions for the Safe Transport of Dangerous Goods by Air (mandatory application for the 191 contracting parties to the Convention on International Civil Aviation from 1 January 2017);

(c) International Air Transport Association: Dangerous Goods Regulations 2017 (fifty-eighth edition) (applicable from 1 January 2017 as a recommended standard for the 265 member airlines of the Association);

(d) ECE: European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2017) (applicable from 1 January 2017, 49 contracting parties);

(e) ECE: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN 2017) (applicable from 1 January 2017, 18 contracting parties);

(f) Intergovernmental Organization for International Carriage by Rail: Regulations concerning the International Carriage of Dangerous Goods by Rail (appendix C to the Convention concerning International Carriage by Rail) (RID 2017) (applicable from 1 January 2017, 41 contracting parties).

7. In the member States of the European Union, the provisions of the European Agreement concerning the International Carriage of Dangerous Goods by Road, the Regulations concerning the International Carriage of Dangerous Goods by Rail and the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways, as amended, have also to be made applicable to domestic traffic at the latest by 30 June 2017.[10]

8. The Common Market of the South (MERCOSUR) countries (Argentina, Brazil, Paraguay and Uruguay) are applying an agreement on the inland transportation of dangerous goods (Acuerdo para la Facilitación del Transporte de Mercancías Peligrosas en el MERCOSUR) based on the twelfth revised edition[11] of the *Model Regulations*, the Regulations concerning the International Carriage of Dangerous Goods by Rail and the European Agreement concerning the International Carriage of Dangerous Goods by Road.

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[10] Commission Directive (EU) 2016/2309 of 16 December 2016, adapting for the fourth time the annexes to Directive 2008/68/EC of the European Parliament and of the Council on the inland transport of dangerous goods to scientific and technical progress (*Official Journal of the European Union*, L 345/48, 20 December 2016).

[11] United Nations publication., Sales No. E.01.VIII.4.

9. The Andean Community (Bolivia (Plurinational State of), Colombia, Ecuador and Peru) have developed draft regulations based on the thirteenth revised edition[12] of the *Model Regulations*, the European Agreement concerning the International Carriage of Dangerous Goods by Road (2005) and the Regulations concerning the International Carriage of Dangerous Goods by Rail (2005), which are still under consideration.

10. In 1997, the Economic and Social Commission for Asia and the Pacific published the *Guidelines for the Establishment of National and Regional Systems for Inland Transportation of Dangerous Goods*,[13] recommending the implementation of the recommendations on the transport of dangerous goods. The transport ministers of the Association of Southeast Asian Nations (ASEAN) signed, on 20 September 2002, Protocol No. 9 to the ASEAN Framework Agreement on the Facilitation of Goods in Transit but one ratification is still missing for its entry into force. The Protocol provides for the simplification of procedures and requirements for the transit transport of dangerous goods in ASEAN countries, using the Model Regulations and the European Agreement concerning the International Carriage of Dangerous Goods by Road. Annex I (Transport of dangerous goods) of the Greater Mekong Subregion Cross-Border Transport Agreement is in force and also requires the use of the Model Regulations and the European Agreement concerning the International Carriage of Dangerous Goods by Road for cross-border transport.

11. In 1999, the Central African Economic and Monetary Community (Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Equatorial Guinea and Gabon) adopted regulations concerning the transport of dangerous goods by road which are partly based on old provisions of the European Agreement concerning the International Carriage of Dangerous Goods by Road but which are not fully in line with the Model Regulations.

12. The examples below show different levels of implementation, and in this regard, it is to be borne in mind that the nineteenth revised edition[7] of the *Model Regulations* was published in 2015 and the twelfth revised edition[11] in 2001:

- European Union member States and Iceland, Liechtenstein, Norway and Switzerland are bound to apply the European Agreement concerning the International Carriage of Dangerous Goods by Road 2017, the Regulations concerning the International Carriage of Dangerous Goods by Rail 2017 and, if relevant, the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways 2017 to domestic transport (implying implementation of the nineteenth revised edition[7]) before 30 June 2017 pursuant to European Union directives (see para. 7 above).
- Russian Federation: the European Agreement concerning the International Carriage of Dangerous Goods by Road 2017 is to be applied to domestic traffic pursuant to Ordinance No. 272 of 15 April 2011 requiring the application of annexes A and B of the Agreement; for rail transport,

[12] Ibid., Sales No. E.03.VIII.5.
[13] Ibid., Sales No. E.98.II.F.49.

regulations (Agreement on International Railway Freight Communications) are based on the eighteenth revised edition.[14]

- United States of America: Title 49 of the Code of Federal Regulations is normally updated on a yearly basis, and has been updated to reflect the nineteenth revised edition[7] with very few exceptions.
- Canada: Regulations reflect the eighteenth revised edition[14] and amendment proposals to reflect the nineteenth revised edition[7] were at the stage of public consultation until 25 January 2017.
- Australia: The Australian Code for the Transport of Dangerous Goods by Road and Rail (edition 7.5, 2016) is based on the nineteenth revised edition.[7] It can be used instead of the previous edition (7.4) from 1 March 2017 and will become compulsory from 1 March 2018.
- Thailand: Regulations for road transport are based on the European Agreement concerning the International Carriage of Dangerous Goods by Road 2015 (based on the eighteenth revised edition[14] of the *Model Regulations*) and work is under way to reflect the 2017 Agreement.
- China: Two national standards (list of dangerous goods, and classification and code of dangerous goods) are based on the sixteenth revised edition,[15] and one standard (packagings) is based on the fifteenth revised edition;[16] adoption of the provisions of the European Agreement concerning the International Carriage of Dangerous Goods by Road 2015 is under consideration for regulating domestic road transport.
- Colombia: Work is under way to implement the eighteenth revised edition.[14]
- Indonesia: National legislation for land transport of dangerous goods is based on the fourteenth revised edition.[17]
- Malaysia: National standards are based on the twelfth revised edition.[11]
- Republic of Korea: the Dangerous Goods Safety Management Act is based on the fifteenth revised edition.[16]
- Brazil: the national legislation is based on the twelfth revised edition.[11]
- Zambia: National standards are based on the seventeenth revised edition.[18]

13. Although international transport of dangerous goods is facilitated by the harmonization of the major international conventions and agreements concerning the transport of dangerous goods with the Model Regulations, and their simultaneous updating, the fact that certain national regulations applicable to inland transport are not brought into line simultaneously, or completely, is still causing problems in international trade, in particular in the case of multimodal transport. For that reason, the Committee has maintained in its draft programme of work an item

[14] Ibid., Sales No. 13.VIII.1 and corrigenda.
[15] Ibid., Sales No. 09.VIII.2.
[16] Ibid., Sales No. 07.VIII.1.
[17] Ibid., Sales No. 05.VIII.1.
[18] Ibid., Sales No. 11.VIII.1.

on global harmonization of regulations on the transport of dangerous goods with the Model Regulations.

C. Mutual administrative support for monitoring compliance of "UN"-marked containment systems with the Recommendations on the Transport of Dangerous Goods: Model Regulations

14. In its resolution 2015/7, the Economic and Social Council requested the Secretary-General:

(a) To seek information from all States Members of the United Nations, and other States if appropriate, on the contact details of:

(i) The competent authorities responsible for national regulations applicable to the transport of dangerous goods by modes of transport other than by air or by sea;

(ii) The competent authorities, and their country identification codes, allowing, in the name of the State, the allocation of the "UN" mark on packagings, pressure receptacles, bulk containers and portable tanks;

(b) To develop and maintain up to date the lists of contact details;

(c) To make this information available on the website of the Economic Commission for Europe.

15. The information collected so far is available on the website of the Economic Commission for Europe.[19] The Economic and Social Council invited all Member States to provide the requested information, and Member States who have not yet done so may wish to use the link[20] provided on the website.

D. Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals

16. In paragraph 23 (c) of the Plan of Implementation of the World Summit on Sustainable Development (Johannesburg, South Africa, 2002),[3] countries were encouraged to implement the Globally Harmonized System of Classification and Labelling of Chemicals as soon as possible with a view to having the system fully operational by 2008.

17. Since the Globally Harmonized System addresses several sectors (transport, consumers, occupational health and safety and the environment), its effective implementation requires significant efforts by Member States to amend many existing legal texts concerning chemical safety in each sector or to enact new legislation.

18. In the transport sector, the Model Regulations have already been updated to reflect the relevant provisions of the sixth revised edition[9] of the *Globally*

[19] http://www.unece.org/trans/main/danger/competent_authorities.html.

[20] https://docs.google.com/forms/d/e/1FAIpQLSeegpMbvKk1pEhCeqH6Z4zjix__oKWPxnZxtjYkVkCgDazbww/viewform?hl=en.

Harmonized System. All the major international instruments listed in paragraph 6 above have also been amended accordingly for effective application in 2015, as have all national regulations that are based on those instruments or that are regularly updated on the basis of the Model Regulations.

19. In the other sectors, the situation is more complex, because implementation requires the amendment or revision of a considerable number of different legal texts and guidelines for application.

20. Legal instruments or national standards implementing the Globally Harmonized System (or allowing its application) in one or several sectors have already been issued in Argentina (2015), Australia (2012), Brazil (2009), Canada (2015), China (2010), Ecuador (2009), Japan (2006), Mauritius (2004), Mexico (2011), New Zealand (2001), the Republic of Korea (2006), the Russian Federation (2010), Serbia (2010), Singapore (2008), South Africa (2009), Switzerland (2009), Thailand (2012), the United States of America (2012), Uruguay (2009), Viet Nam (2009) and Zambia (2013), as well as in the 28 member States of the European Union and the 3 member States of the European Economic Area (2008).

21. In Argentina, the Ministry of Labour, Employment and Social Security issued resolution No. 801/2015 of 10 April 2015 approving implementation of the Globally Harmonized System at the workplace.

22. In Canada, the Hazardous Products Regulations amending the Workplace Hazardous Materials Information System (WHMIS 1998) in accordance with the provisions of the Globally Harmonized System were published in part II of the Canada Gazette on 11 February 2015. To assist manufacturers and importers in complying with the requirements of the new Globally Harmonized System-based Workplace Hazardous Materials System of Classification and Labelling of Chemicals (WHMIS 2015), the complete Technical Guidance on the requirements of the Hazardous Products Act and the Hazardous Products Regulations was released on 2 December 2016.

23. In the Russian Federation, a technical regulation on the safety of chemical products was adopted on 7 October 2016 through Government Decree No. 1019. With this regulation, the provisions of the Globally Harmonized System-based national standards on test methods, classification criteria and hazard communication elements become mandatory.

24. Countries that have already implemented the Globally Harmonized System continue to update the legal instruments or national standards implementing the System, in accordance with the provisions of the revised editions of the *Globally Harmonized System*. For instance, between July 2015 and July 2016, the European Union published three new sets of amendments to Regulation (EC) No. 1272/2008[21] (the seventh, eighth and ninth adaptations to technical and scientific progress), to align its provisions with those of the fifth revised edition[22] of the *Globally Harmonized System* and to update the list of harmonized classifications contained in

[21] Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006 (*Official Journal of the European Union*, L 353/1 of 31 December 2008).

[22] United Nations publication, Sales No. 13.II.E.1 and corrigenda.

annex VI of the Regulation. The provisions for safety data sheets in annex II to the European Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)[27] have also been aligned with the provisions of the fifth revised edition of the *Globally Harmonized System*.

25. Work on the revision and amendment of legal texts, standards and guidelines to achieve the implementation of the Globally Harmonized System as soon as possible continues in other countries. A regional Globally Harmonized System policy was agreed upon and signed by the ministries of trade and industry of the Southern African Development Community (SADC) member countries in 2012 for implementation of the Globally Harmonized System by January 2020. A Government decree (on approval of the classification system of chemical substances/mixtures and requirements for hazard communication elements: labelling and safety data sheets) was adopted in Kyrgyzstan in February 2015. In Tajikistan, the proposals for implementation of the Globally Harmonized System were approved for inclusion in the National Sustainable Development Strategy (extending to 2030). In Guatemala and Costa Rica, two pieces of legislation (a governmental agreement and a regulation, respectively) addressing implementation of the Globally Harmonized System have been drafted and are under consideration.

26. Several other countries completed, initiated or continued projects and activities relating to the implementation of the Globally Harmonized System during the period 2015-2016 (see paras. 28 and 29 below).

27. In order to monitor the status of implementation of the Globally Harmonized System, the secretariat has compiled on its website the information that it has collected from various sources. The website offers the possibility of contacting the secretariat to provide updates or to submit new information for the various sectors concerned. **All countries are therefore invited to provide such information, as indicated in paragraph 6 of part B of the draft resolution contained in paragraph 1 above.**

28. Regarding provision of technical advice and expertise, the secretariat was invited to deliver information about the Globally Harmonized System, regulations on transport of dangerous goods and the work of the Committee and its two subcommittees in a series of face-to-face capacity-building workshops organized by several stakeholders in Costa Rica (February 2015).

29. With the logistic, technical or financial support of several Member States, United Nations organizations, institutes and programmes (the International Labour Organization (ILO) the United Nations Environment Programme (UNEP), the World Health Organization (WHO) and the United Nations Institute for Training and Research (UNITAR)), intergovernmental organizations (the Organization for Economic Cooperation and Development (OECD) and the European Union), governmental agencies and the private sector, several additional capacity-building

[27] Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC.

and training activities or projects related to the implementation of the Globally Harmonized System were conducted in Benin, Bolivia (Plurinational State of), Burundi, Chile, Colombia, the Democratic Republic of the Congo, Guatemala, Haiti, Kiribati, Kyrgyzstan, Mali, Mexico, Tajikistan, Togo, Tunisia and Uzbekistan.

30. Development and updating of guidance, training and resource materials in accordance with the provisions of the Globally Harmonized System continued during 2015-2016. For example:

(a) The fourth through seventh editions of the UNITAR/ILO Globally Harmonized System e-learning course entitled "Classifying chemicals according to the GHS" were held during 2015-2016, with participants from all over the world representing Governments, industry, international organizations, academia and civil society. In 2016, UNITAR undertook translation of the e-learning course into Spanish;

(b) As part of project supported by the European Union to further develop, promote and train on the Inter-Organization Programme for the Sound Management of Chemicals Toolbox for Decision-making in Chemicals Management, UNITAR, in collaboration with ILO, developed a management scheme for implementing a classification and labelling system for chemicals based on the Globally Harmonized System. The Inter-Organization Programme Toolbox is an Internet-based tool which enables countries to identify the most relevant and efficient tools with which to address specific national problems in chemicals management;

(c) WHO and ILO International Chemical Safety Cards continue to be developed and updated in accordance with the provisions of the Globally Harmonized System. Out of 1,777 chemicals in the database, 525 have now been classified according to the Globally Harmonized System;

(d) The Food and Agriculture Organization of the United Nations (FAO) and WHO completed the revision of the previous editions of the Guidelines on Good Labelling Practices for Pesticides and the Guidelines on Highly Hazardous Pesticides in 2015 and 2016, respectively, to take account of the provisions of the Globally Harmonized System.

31. The Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals has also continued its cooperation with treaty bodies that administer certain international conventions dealing with specific aspects of chemical safety in order to facilitate the implementation of the Globally Harmonized System through such conventions (the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal; the Montreal Protocol on Substances that Deplete the Ozone Layer; the Stockholm Convention on Persistent Organic Pollutants; the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade; and the Convention on the Transboundary Effects of Industrial Accidents (ECE)).

III. Work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals during the biennium 2015-2016

A. Meetings held

32. The following meetings were held during the biennium 2015-2016:

(a) Subcommittee of Experts on the Transport of Dangerous Goods: forty-seventh session, 22-26 June 2015 (ST/SG/AC.10/C.3/94 and Corr.1 and Add.1); forty-eighth session, 30 November- 9 December 2015 (ST/SG/AC.10/C.3/96 and Add.1); forty-ninth session, 27 June-6 July 2016 (ST/SG/AC.10/C.3/98 and Add.1); and fiftieth session, 28 November-6 December 2016 (ST/SG/AC.10/C.3/100 and Add.1);

(b) Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals: twenty-ninth session, 29 June-1 July 2015 (ST/SG/AC.10/C.4/58); thirtieth session, 9-11 December 2015 (ST/SG/AC.10/C.4/60); thirty-first session, 5-8 July 2016 (ST/SG/AC.10/C.4/62); and thirty-second session, 7-9 December 2016 (ST/SG/AC.10/C.4/64);

(c) Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals: eighth session, 9 December 2016 (ST/SG/AC.10/44 and Corr.1 and Add.1-3).

33. The following 27 countries participated in the work of the Committee as full members of the Subcommittee of Experts on the Transport of Dangerous Goods or the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals or of both subcommittees: Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Finland, France, Germany, Italy, Japan, Kenya, the Netherlands, New Zealand,[24] Norway, Poland, Portugal, Qatar,[24] the Republic of Korea, the Russian Federation, South Africa, Spain, Sweden, Switzerland,[25] the United Kingdom of Great Britain and Northern Ireland and the United States of America.

34. India, Mexico and Morocco, full members of the Subcommittee of Experts on the Transport of Dangerous Goods; Denmark, Greece, Ireland, Nigeria, Senegal, Serbia, Ukraine and Zambia, full members of the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals; and Czechia and Iran (Islamic Republic of), full members of both subcommittees, did not participate.

35. The Governments of Luxembourg,[25] Malta,[24] New Zealand,[25] Peru, Qatar,[25] Romania, Slovakia and Switzerland,[24] were represented by observers. The European Union, eight specialized agencies and intergovernmental organizations and 46 non-governmental organizations also participated.

[24] Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals only.

[25] Subcommittee of Experts on the Transport of Dangerous Goods only.

36. Liaison was maintained with the international bodies or organizations responsible for individual modes of transport, in particular ECE, ICAO, IMO and the Intergovernmental Organization for International Carriage by Rail.

37. The Committee paid special attention to the coordination of its own activities with those of other international organizations whose activities impinge on the field of transport of dangerous goods or of classification and labelling of chemicals, such as FAO, the International Atomic Energy Agency (IAEA), the Universal Postal Union (UPU), ILO, WHO, UNITAR and OECD, to ensure that their work would complement, rather than duplicate or clash with, its own activities and recommendations.

38. Secretariat services were provided by the secretariat of ECE.

B. Work of the Subcommittee of Experts on the Transport of Dangerous Goods

39. During the biennium 2015-2016, the Subcommittee discussed various questions related to its terms of reference, in accordance with the programme of work as laid out in document E/2015/66, paragraph 50 (a).

40. On the basis of that work, the Committee adopted amendments[7] to the nineteenth revised edition[7] of the *Recommendations on the Transport of Dangerous Goods: Model Regulations* and to the sixth revised edition[8] of the *Recommendations on the Transport of Dangerous Goods: Manual of Tests and Criteria*, consisting mainly of new or revised provisions concerning:

(a) The listing and classification of some existing and new dangerous substances and articles, related packing and test methods, and the revision of some packing and tank requirements;

(b) Electric storage systems (including testing, packing and marking of lithium batteries, including damaged and defective batteries);

(c) The classification procedure for ammonium nitrate based fertilizers;

(d) New procedures for classification of corrosive substances;

(e) The testing of explosives;

(f) The transport of self-reactive substances, organic peroxides and polymerizing substances under temperature control;

(g) The transport of vehicles powered by dangerous goods;

(h) The applicability of International Organization for Standardization standards to the manufacture of new pressure receptacles or service equipment.

41. The Subcommittee updated guiding principles intended to explain the rationale behind the provisions contained in the Model Regulations and to guide regulators when assigning transport requirements to specific dangerous goods.

42. The Subcommittee considered the issue of possible further measures to facilitate global harmonization of regulations on the transport of dangerous goods with the Model Regulations, already discussed in the previous biennium (see also

para. 13 above). It agreed again that additional efforts should be made to improve harmonization at the worldwide level. **Governments and international organizations concerned are invited to provide feedback by drawing attention to requirements in their national, regional or international instruments that deviate from the Model Regulations.**

43. **The action recommended by the Committee to be taken by the Economic and Social Council with respect to the work of the Subcommittee of Experts on the Transport of Dangerous Goods is reflected in part A, paragraphs 1 to 6, of the draft resolution contained in paragraph 1 of the present report.**

C. Work of the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

44. During the biennium 2015-2016, the Subcommittee discussed various questions related to its terms of reference in accordance with its programme of work, as laid out in document E/2015/66, paragraph 50 (b).

45. On the basis of that work, the Committee adopted amendments[6] to the sixth revised edition[9] of the *Globally Harmonized System of Classification and Labelling of Chemicals* intended to update, clarify or complement the Globally Harmonized System concerning, in particular, revised criteria for categorization of flammable gases within category 1; miscellaneous amendments intended to clarify the definitions of some health hazard classes; additional guidance to extend the coverage of section 14 of the Safety Data Sheets to all bulk cargoes, regardless of their physical state, transported under IMO instruments; revised and further rationalized precautionary statements in annex 3; and a new example in annex 7 addressing labelling of small packagings with fold-out labels.

46. The Subcommittee kept under review progress made in the implementation of the Globally Harmonized System on the basis of reports submitted by its members and participating intergovernmental and non-governmental organizations.

47. The Subcommittee continued to cooperate with treaty bodies established under international conventions concerning chemical safety to promote the implementation of the Globally Harmonized System through such conventions (see also para. 27 above).

48. **The action recommended by the Committee to be taken by the Economic and Social Council with respect to the work of the Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals is reflected in part B, paragraphs 1 to 7, of the draft resolution contained in paragraph 1 of the present report.**

IV. Programme of work and schedule of meetings for the biennium 2017-2018

49. The Committee agreed that the programme of work for the biennium 2017-2018 should be as follows:

(a) Subcommittee of Experts on the Transport of Dangerous Goods:

(i) Explosives and related matters (including amendments to the list of dangerous goods: electronic detonators; review of test series 6; review of tests in parts I-III of the *Manual of Tests and Criteria* (including the United Nations standard detonator, and minimum burning pressure tests as a possible alternate or replacement for the 8 (c) and/or the 8 (d) tests); guidance for application of Test Series 3 and 4; review of packing instructions for explosives; stability tests for industrial nitrocellulose; application of security provisions to explosives not otherwise specified; classification of articles under UN No. 0349; test N.1 for readily combustible solids; and review of chapter 2.1 of the Globally Harmonized System);

(ii) Listing, classification and packing (including amendments to the list of dangerous goods and packing instructions, toxicity of UN Nos. 2248, 2264 and 2357, polymerizing substances, seed cake, and category A infectious waste);

(iii) Electric storage systems (including testing of lithium batteries; the hazard-based system for classification of lithium batteries; transport provisions; damaged or defective lithium batteries; and sodium-ion batteries);

(iv) Transport of gases (including global recognition of United Nations and non-United Nations pressure receptacles);

(v) Miscellaneous proposals of amendments to the Model Regulations (including marking and labelling issues, packaging issues and tank issues);

(vi) Cooperation with IAEA;

(vii) Global harmonization of transport of dangerous goods regulations with the Model Regulations;

(viii) Guiding principles for the Model Regulations (updating);

(ix) Issues relating to the Globally Harmonized System (including criteria for water-reactivity; testing of oxidizing substances; references to OECD Guidelines; and use of the *Manual of Tests and Criteria* in the context of the Globally Harmonized System;

(b) Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals:

(i) Classification criteria and related hazard communication, including:

a. Review of chapter 2.1 (Explosives) of the Globally Harmonized System);

b. Use of the *Manual of Tests and Criteria* in the context of the Globally Harmonized System;

c. Criteria for water-reactivity;

d. Tests for oxidizing solids and liquids;

e. Stability tests for industrial nitrocellulose

f. Dust explosion hazards;

g. Use of non-animal testing methods for classification of health hazards;

h. Practical classification issues;

i. Aspiration hazards;

j. Nanomaterials;

(ii) Hazard communication issues, including:

a. Guidance on labelling of small packagings;

b. Improvement of annexes 1-3 and further rationalization of precautionary statements;

c. Review of annex 4, paragraph A4.3.3.2.3 (use of proportion ranges);

(iii) Implementation issues, including:

a. Assessing the possible development of a global list of chemicals classified according to the Globally Harmonized System;

b. Activities to facilitate the coordinated implementation of the Globally Harmonized System and monitor its status of implementation;

c. Strengthening and increasing cooperation with United Nations programmes and specialized agencies and regional, governmental and intergovernmental organizations, as well as non-governmental organizations responsible for the administration of international agreements and conventions dealing with the management of chemicals, so as to give effect to the Globally Harmonized System through such instruments;

(iv) Development of guidance on the application of the criteria, as needed, including examples illustrating application of the classification criteria and any related hazard communication issues, and alignment of guidance in annex 9 (section A9.7) and annex 10 to the Globally Harmonized System with the criteria in chapter 4.1;

(v) Capacity-building, including:

a. Reviewing reports on training and capacity-building activities;

b. Providing assistance to United Nations programmes and specialized agencies involved in training and capacity-building activities, such as UNITAR, ILO, FAO and the WHO/International Programme on Chemical Safety, through the development of guidance materials, advice with respect to their training programmes and identification of available expertise and resources.

50. Bearing in mind that, in accordance with Economic and Social Council resolution 1999/65, the maximum number of meeting days allocated to the Committee and its subsidiary bodies is 38 (76 meetings), the Committee agreed that the schedule of meetings for the period 2017-2018 should be as follows:

2017

3-7 July 2017: Subcommittee of Experts on the Transport of Dangerous Goods, fifty-first session (10 meetings)

10-12 July (morning) 2017: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, thirty-third session (5 meetings)

27 November-6 December (morning)[26] 2017: Subcommittee of Experts on the Transport of Dangerous Goods, fifty-second session (15 meetings)

6 (afternoon)[26]-8 December 2017: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, thirty-fourth session (5 meetings)

Total: Subcommittee of Experts on the Transport of Dangerous Goods: 25 meetings; Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals: 10 meetings

2018

25 June-4 July (morning)[26] 2018: Subcommittee of Experts on the Transport of Dangerous Goods, fifty-third session (15 meetings)

4 (afternoon)[26]-6 July 2018: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, thirty-fifth session (5 meetings)

26 November-4 December 2018: Subcommittee of Experts on the Transport of Dangerous Goods, fifty-fourth session (14 meetings)

5-7 December (morning) 2018: Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals, thirty-sixth session (5 meetings)

7 December (afternoon) 2018: Committee, ninth session (1 meeting)

Total: Subcommittee of Experts on the Transport of Dangerous Goods: 29 meetings;[26] Subcommittee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals: 10 meetings; Committee: 1 meeting

51. **Action recommended by the Committee to be taken by the Economic and Social Council with respect to its programme of work is reflected in part C, paragraphs 1 to 3, of the draft resolution contained in paragraph 1 of the present report.**

[26] With the possibility for both subcommittees to combine their meeting allotment and meet jointly for the full day on 6 December 2017 and 4 July 2018.